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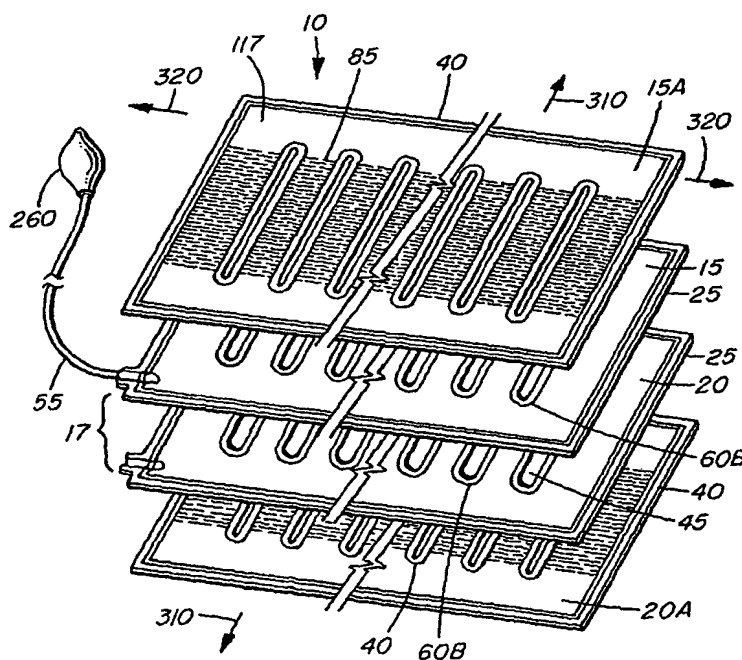
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(54) Title: FLUID OPERATED ACTUATORS AND PNEUMATIC UNLOADING ORTHOSES



(57) Abstract: A flexible fluid filled actuator (10) has an elastic bladder (17) and a guide (117) surrounding the bladder. The guide has asymmetrical elastic properties. When the bladder is inflated the guide directs the bladder to expand preferentially in a selected direction or directions. The actuator has utility in the traction and/or unloading of portions of the body. A fluid-filled traction apparatus is disclosed which has particular advantages in spinal unloading.



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